

Audit Quality and Earnings Management: With Reference to Family-Owned Firms

S. Tripathy¹, R.C. Das²¹ University of Bahrain, Shakir, Bahrain;² Bhadrak Autonomous College, Bhadrak, India

ABSTRACT

The purpose of the study is to examine the association between earnings management and audit quality of Two hundred sixty-eight (268) business group firms from 2016 to 2021. The study has taken both accrual-based earnings management and a composite proxy for real earnings management to estimate the earnings management practices of the Indian business group firm. BIG_4 is used as a dummy variable for measuring the audit quality of firms. To examine the association between earnings management and audit quality, Panel fixed effect model is used. The results signify that audit quality is negatively associated with earnings management. This finding indicates that business group firms are quite concerned about earnings quality and less likely to be involved in earnings management practices for India. The result would draw the attention of law makers, policy makers and government regarding the loopholes of principles-based accounting. Especially, the result would help the accounting standard setter to change and rectify the present system of accounting principles.

Keywords: accrual-based earnings management; real earnings management; business group firms; audit quality

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INTRODUCTION

Earnings management manipulates the genuine economic transactions reflected in financial statements [1]. Essentially, there are two types: (a) accrual-based management (AM) and (b) real-based earnings management (RM). Analyzing one aspect of earnings management alone cannot definitively determine whether it's driven by accrual-based or real-based methods Fields et al. [2]. In theory, Profit (Earnings) = F (Accrual, cash flow). Changes in revenue recognition policies, setting aside provisions for bad debts, timing of asset write-offs, and other factors can all lead to accrual-based earnings management in financial statements. Real earnings management involves deviating from normal business operations by adjusting the timing and structure of financial transactions Roychowdhury [3]. Corporate frauds have occurred both in India and globally over the past few decades, with examples including Satyam, Subhiksha, Reebok, DLF, Vishal Mega Mart-India, Enron, Lehman Brothers, etc. Several scholars have discussed the role of auditors in the corporate sphere in this context. An auditor, appointed independently by shareholders, evaluates an organization's financial records to ensure accuracy and provides an impartial opinion Usman et al. [4]. According to a survey by the Arbitrage Research Institute on Indian

fraud companies, the average size of scams has risen from ₹2820 million in 2009 to ₹5020 million Mangala and Kumari [5]. It's crucial for policymakers and the business community to address this issue seriously.

Rather than reacting to earnings management in financial statements, companies should adopt a proactive approach. In accordance with current regulatory standards, auditors should be actively engaged in all stages of the financial statement auditing process [6]. The role and responsibilities of auditing practices have been enhanced under the New Companies Act of 2013. According to this new provision, auditors must promptly report to the central government within the specified timeframe if they have reason to suspect that company officers or employees are involved in or have committed fraud against the company. This paper aims to explore how the quality of audits influences earnings management practices among business groups in India. Research by Jaiswal and Banerjee [7] indicates that the majority of businesses in India are family-owned. Given the country's owner-centric culture, there is a significant likelihood of earnings manipulation in family-dominated enterprises. Therefore, this study examines the impact of auditor's roles in earnings management practices, focusing on business group organizations as a sample in the Indian context.

The research findings indicate a negative correlation between audit quality and earnings management in both scenarios, which is consistent with other studies Debnath et al. [8]. According to this study, Indian business group firms demonstrate a lower inclination towards employing earnings management techniques and prioritize the quality of their earnings. With the implementation of the New Companies Act of 2013, the role of auditors is now explicitly defined in corporate governance procedures. Article 49 of this Act stipulates that “the company’s financial information must be disclosed and its financial reporting process must be overseen to ensure that the financial statement is accurate, sufficient, and credible.” Besides the primary test, the study has undergone various robustness tests to confirm the impact of audit quality on earnings management. The results from each sensitivity analysis consistently show a negative relationship between audit quality and earnings management, indicating that managers are less likely to utilize their discretionary power to influence earnings manipulation.

The remainder of the article is structured into four sections. The “Review of Literature” section delves into the audit quality and earnings management strategies adopted by businesses. Following this, the subsequent section outlines the research methodology, including sample selection criteria and data description. The third section presents empirical findings and analyses resulting from statistical research. The study is concluded in the last section.

REVIEW OF LITERATURE

According to Chen and Zhou [9], the size of auditors, coupled with their high expertise, constrains earnings management. Lin and Hwang [10], through a meta-analysis, concluded that the audit committee, auditor size, and auditor independence significantly contribute to mitigating earnings management. Gunney [11] found that companies audited by reputable auditors demonstrate lower levels of earnings management manipulation due to auditors’ experience. Zang [12] observed that companies undergoing audits by high-quality auditors are compelled to engage in accrual-based management. Contrary to initial expectations, Gakhar [13] discovered, through a survey of 65 Indian auditors, that companies still employ earnings management techniques even when they have top-tier auditors in-house.

Building on prior research, the current study utilizes audit quality as a dummy variable to assess earnings management, assigning a value of one if the organization is audited by one of the big four auditing firms. Corporate governance emerges as a potent tool against fraud, as indicated by a study conducted by Mangala and Kumari [5], which surveyed 336 auditors regarding their perceptions of anti-fraud measures’ efficacy. Furthermore, the report advocates for investments rather than mere expenditures in anti-fraud measures.

Mensah and Yeboah [14] investigated the impact of audit committee efficacy and audit quality on earnings management using a sample of listed firms from the Ghana Stock Exchange, spanning 180 firm-years of observations. Their study revealed a significant inverse correlation between earnings management and the financial expertise, past experience, size, and quality of the audit committee. However, no discernible link was found between earnings management and the audit committee meeting (ACMT) or independence.

Orazalin and Akhmetzhanov [15] explored how the cost of debt of Kazakhstan’s listed firms is influenced by audit quality and earnings management. Their study included publicly traded firms listed on the Kazakhstan Stock Exchange (KASE) between 2011 and 2016. They found a negative relationship between the cost of debt and earnings management, indicating that greater audit quality leads to lower costs of debt. However, they observed no significant difference in the impact of earnings management on loan costs between companies audited by other firms and those audited by the Big Four.

Waweru and Prot [16] investigated whether adherence to corporate governance regulations limits earnings management for Tanzanian and Kenyan listed companies. Using a sample of 48 companies from the Dar es Salaam Stock Exchange and the Nairobi Stock Exchange spanning the years 2005 to 2014, they discovered an adverse and significant correlation between audit quality and discretionary accruals (DAs). However, board independence, gender diversity on the board, and director share ownership were positively and significantly correlated with DAs, suggesting that corporate governance may not have effectively curbed earnings management in eastern Africa.

In a similar line, Beiruth et al. [17] examined the relationship between earnings management and the cost of debt using a sample of 3,503 privately held

Brazilian enterprises. Their findings indicated that the cost of debt increases with higher degrees of earnings management, suggesting a need for privately owned businesses to prioritize accounting result quality over earnings management strategies that may raise loan costs.

Chowdhury and Eliwa [18] investigated whether audit quality influences real earnings management activities among UK-listed firms in the post-adoption period of International Financial Reporting Standards (IFRS). Their study, based on 4,774 firm-year observations from 2005 to 2018, revealed a strong positive correlation between higher levels of sales, manipulation of discretionary spending, and the presence of Big Four auditors, as well as a favorable correlation between the presence of Big Four auditors and the total measure of real earnings management.

Likewise, Beiruth et al. [17] empirically demonstrated the relationship between audit quality and real earnings management in Bangladesh's capital market. Using a panel of 2,195 firms listed from 2000 to 2017 on the Dhaka Stock Exchange, they found an unfavorable relationship between services provided by the "Big 4" audit companies and the degree of actual profits management techniques, with no correlation observed between real earnings management and industry-specialized auditors based on audited assets. In a similar line, lastly, Kim and Yi [19] found that business-associated group enterprises in Korea tend to control their earnings more than non-affiliated firms. Similarly, Beuselinck and Deloof [20] observed that business group firms in Belgium tend to manipulate earnings to minimize taxes and control shareholder "self-servicing transactions".

RESEARCH GAP

Prior studies have paid the least attention to how the major four auditors' involvement affects the ownership-centric enterprises' earnings management in emerging economies like India. A company's officials or employees may commit fraud, and the Companies Act of 2013 has increased the auditor's reporting obligations to include assessing the efficacy and sufficiency of internal financial control systems. Companies with a larger ownership concentration typically have more managerial freedom in financial reporting, according to a 2015 rating agency assessment from Fitch. Although PSUs and banks

have a system of joint audits, it is unclear if the quality of the audits has improved. Every year, in a joint audit, it is exceedingly challenging for a corporation to persuade an auditor. The flexibility to voice an opinion on any topic that the auditor believes shareholders should be aware of is granted by the 2013 Companies Act. Many enterprises belong to a certain business or promoter group in India, and there are numerous business groups with significant promoter shareholdings. Examining the possible correlation between audit quality and earnings management of Indian business group firms excites the study from this angle.

METHODOLOGY

Measurement of AM and RM

In order to calculate the discretionary accruals (a stand-in for AM), the study employs the Modified Jones model created by Beuselinck and Deloof [20]. The [3] approach was used to estimate real earnings management (RM), a proxy for discretionary spending, by taking into account two proxies: anomalous cash flows and abnormal discretionary expenditures.

Regression Model and Variable Description

Multiple regression analysis employing pooled data is used to look at the association between firm-specific factors and earnings management. For the unobserved heterogeneity that is constant over years and industries and correlated with the independent variable, the study has estimated pooled ordinary least squares (pooled OLS) and pooled regression controlling time and industry fixed effects, in accordance with previous studies [21]. It is clear that the firm-specific intercept increases the models' explanatory power when comparing the outcomes of the pooled OLS to the pooled regression that controls time and industry fixed effects. Table 6 displays the outcomes of regression equations with a fixed effect model.

Examining the connection between accrual-based earnings management (AM) and audit quality requires the use of equation (1). To investigate the connection between real earnings management (RM) and audit quality, apply equation (2). Control variables include the size of the company, its financial leverage, its performance, its dividend payout policy, its accounting flexibility, its absolute total accruals, institutional ownership, and its growth prospects.

Regression model 1 is as follows:

$$AM_t = \alpha_1 + \alpha_2 BIG_4t + \alpha_3 SIZE_t + \alpha_4 LEV_t + \alpha_5 ROA_t + \alpha_6 NOA_t + \alpha_7 AB_ACC_t + \alpha_8 INST_t + \alpha_9 MB_t + \alpha_{10} B_SIZE_t + \alpha_{11} AGE_t + \epsilon \quad (1)$$

Regression model 2 is as follows:

$$RM_t = \alpha_1 + \alpha_2 BIG_{4t} + \alpha_3 SIZE_t + \alpha_4 LEV_t + \alpha_5 ROA_t + \alpha_6 NOA_t + \alpha_7 AB_{ACC_t} + \alpha_8 INST_t + \alpha_9 MB_t + \alpha_{10} B_{SIZE_t} + \alpha_{11} AGE_t + \epsilon \quad (2)$$

where AM_t = Accrual-based earnings management (AM) for year t [21]; RM_t = Roychowdhury [3] model is used to measure the Real activities' earnings management for year t ; BIG_4_t = Dummy is used to measure the audit quality. 1 is used as a dummy if it is audited by big four firms and 0 otherwise for year t ; $SIZE_t$ = Logarithm of the total assets used to measure the firm's size for year t ; LEV_t = Ratio of total liabilities to total assets is used as a leverage of firm for year t ; ROA_t = Firms' performance is measured as the ratio of net income to total assets of firm for year t ; NOA_t = Accounting flexibility is measured by net operating assets at the beginning of the year scaled by the lagged sales of a firm for year t ; AB_ACC_t = Scaled by total assets, the absolute total accruals of the firm for year t ; $INST_t$ = The ratio of the number of outstanding common shares of the company at year t to the number of common shares held by institutional shareholders (banks, mutual funds, insurance companies, foreign institutional investors, etc.); MB_t = The market-to-book ratio of the company for the year t is determined by dividing the equity market value by the equity book value. This is utilised as a chance for the company to flourish; DIV_t = The dividend paid to shareholders is divided by net income in year t to determine the firm's dividend ratio.

Control Variable and Earnings Management

Previous studies have found a wide range of control variables that can affect managers' decisions, including size, leverage, company performance, absolute accruals, growth potential, etc. Githaiga et al. [22] have both examined the connection between firm size (SIZE) and earnings management. Cohen and Zarowin [23] discovered that larger firms give managers greater

flexibility in managing profitability. However, Githaiga et al. [22] contended that large companies are less motivated to manage their profitability since they are more closely watched by the market and face higher political costs. According to studies by Roychowdhury [3] and Cohen and Zarowin [23], companies with greater market-to-book ratios (MB) manage their earnings more than those with lower MB. It has been shown that there are differing effects of leverage (LEV) on a company's capacity to control its earnings. According to Tulcanaza et al. [24], agency expenses have a negative relationship between leverage (LEV) and earnings management. In contrast, companies with high leverage have a higher frequency of GAAP violations and are more likely to increase their accruals in order to prevent debt covenant violations, according to research by Cohen and Zarowin [23]. Barton and Simko [25] looked into how accounting flexibility affected controlling earnings. Net operating assets scaled by lagged sales (NOA) was used to quantify accounting flexibility, and the results showed that companies with greater accounting flexibility control their profitability more aggressively. According to research by Kothari et al. [26], earnings management and performance as indicated by return on asset (ROA) are positively correlated. Firm performance and earnings management are positively correlated. The firm's size, financial leverage, performance, accounting flexibility, absolute total accruals, dividend payout, institutional ownership, and expansion potential are some of the control factors included in their study. Sawhney et al. [27] find that mandatory CSR spending has no significant impact on corporate financial performance in India.

Sample selection and data description

This study's data pertains to all companies that are listed on the Bombay Stock Exchange (BSE) or the National Stock Exchange (NSE). Since the Securities Exchange Board of India (SEBI) has established standards for financial reporting that all listed companies must adhere to, the analysis is limited to listed companies only. Government-owned businesses and those in the banking and financial services industries are not included in the sample because of their unique financial practices and regulatory norms. Companies who lack sufficient data for the study's analysis are also disqualified. In light of this, a balanced panel data set including 1340 firm-year observations

Sample Design

Table 1

Sample Selection Procedure	Number of Companies
Sample Collection Form CMIE Data Base (Prowess)	2919
Excluded the Banking and Financial Companies	1197
Excluded the Government Owned Firms	55
Excluded the Missing Information Companies	1399
Total Sample for Selected for Analysis	268

Source: Authors' compilation.

for 268 enterprises was acquired between 2016 and 2021. The study period runs from 2016 to 2021, or from the 2016–17 fiscal year to the 2020–2021 fiscal year. *Table 1* presents the sample selection procedure, and the sample is selected for various industries based on the National Industry Classification (NIC)* code. In order to conduct the analysis for this study, a total

* The NIC code is a classification system based on the activities undertaken by a business. 20 industries are classified based on CMIE's Prowess classification of Industries.

sample of 268 enterprises is divided into 20 industries based on their two-digit NIC codes. The entire sample is comprised of business group firms. A business group is a collection of companies that are accustomed to working together and are accustomed to taking coordinated action, even though they are legally independent, according to Khanna and Rivkin [28]. According to Prowess India, the definition of a business group is also defined.

EMPIRICAL RESULT AND DISCUSSION

Descriptive Statistics

The study's response, predicted, and control variables are displayed in *Table 2* of the descriptive statistics. Approximately 3 percent of total assets are managed by Indian enterprises through accrual-based earnings management. Previous studies have discovered that accrual-based earnings management is approximately 5 percent, 2.9 percent, and 8 percent, respectively [29]. Kaur et al. [30] investigated accrual-based earnings management in the context of the USA, focusing on 1 to 5 percent. Researching a company's accrual-based earnings management alone might not provide an accurate view of that company's earnings management Fields et al. [2]. Real earnings management is thought to account for about 4% of all Indian companies' assets, according to the study.

Table 2

Descriptive Statistics

Variables	Mean	Median	S.D.	Min	Max
AM	0.03	0.01	0.35	-2.32	0.57
RM	0.04	0.00	0.16	-0.88	1.00
MB	2.67	1.76	2.67	-0.09	18.37
SIZE	3.79	3.87	0.87	0.20	7.13
LEV	0.48	0.48	0.24	0.05	1.63
ROA	0.97	0.88	0.53	0.16	3.47
NOA	0.56	0.59	0.17	0.07	0.83
INST	0.24	0.23	0.13	0.00	0.69
DIV	0.30	0.24	0.46	-4	10.86
BIG4	0.32	0	0.47	0	1
AB_ACC	0.06	0.05	0.17	-1.72	3.05

Source: Authors' compilation.

In the USA setting, Cohen and Zarowin [23] and Chen et al. [31] calculated the real earnings management to be approximately 8.5 percent, while in the Taiwan contest, it was 4.7 percent. 32% of the sample firms were audited by BIG_4 audit firms on average. This indicates that in order to guarantee the calibre of the reports that are released, one-third of Indian businesses conduct audits with recognised audit firms. The normality assumption is upheld by the control variables SIZE, LEV, NOA, AB_ACC, and INST. For example, the mean and median values of ROA, MB, and DIV do not satisfy the criterion of normalcy. Scatter plots and the standard Shapiro-Wilk test were used to verify the residuals' normalcy of data distribution. There was significance in the probability values of the residuals.

Correlation

The degree of relationship between variables is determined using Pearson correlation. The degree to which the variables are associated is shown in *Table 3*. There exist positively correlated and negatively correlated variables. To examine the multicollinearity problems, the Variance Inflation Factor (VIF) is employed among the control variables. There are no problems with multicollinearity, according to the study. According to the study, AM and BIG_4 have a negative association that is statistically significant ($p < 0.05$). Additionally, a statistically significant ($p < 0.05$) negative association between RM and BIG_4 is shown in the study. As a result, the companies that the BIG 4 audits do not engage in earnings management techniques.

Model Selection

Among the pooled OLS, fixed effect, and random effect models, run the panel diagnostic test (*Table 4*) to make sure the best model fits the data. The data in this analysis are heteroscedastic (the Cook-Weisberg test for heteroscedasticity indicates that the data are not suited for OLS).

Correlation analysis

Next, the panel diagnostic test was conducted between the Pooled Ols model and the Random effects model utilising the Breusch and Pagan Lagrangian multiplier test. Compared to the Pooled OLS model, the Random Effect model performs consistently in this test. In order to compare the fixed effect model to the random effect model, the study lastly used the Hausman test.

In contrast to the random effect model, the fixed effect model rejects the hypothesis. The investigation concluded that the fixed effect model is suitable for this analysis as a result.

ANALYSIS OF RESULT

For this data analysis, the panel fixed effects model is consistent based on the panel diagnostic test (*Table 4*). To evaluate the auditor's due diligence and auditing practise expertise, the study only included business group firms. To gauge the audit quality of this study, four BIG_4 firms – Deloitte, Ernst & Young (EY), PricewaterhouseCoopers (PwC), and Klynveld Peat Marwick Goerdeler (KPMG) – were taken into consideration. Furthermore, the practices of Indian business group firms for managing their earnings are measured using both real and accrual-based earnings management as a proxy. Both accrual-based earnings management and real earnings management's primary outcomes are shown in *Table 5*. The findings in column I indicate that there is a negative significant correlation (t -value of -4.04 , $p < 0.01$) between audit quality and accrual-based earnings management. Furthermore, the results show that audit quality and real earnings management have a negative significant relationship (Column 2), with a t -value of -1.98 ($p < 0.05$). Also in line with earlier research [8, 9, 12] is this specific outcome. According to the findings, audit firms are very concerned about their reputations in the future and about using their knowledge to encourage managers to avoid accrual-based and real earnings management.

To run the model in this empirical research, the study used eight control variables. There are only three strongly correlated control variables with the response variable (the other five are not statistically correlated) out of the eight control variables. It is evident from the data that control factors had minimal impact on the outcomes of the experiment. It may be concluded that the outcomes are strong in both instances, demonstrating that audit firms are deeply concerned about their reputations going forward and are making use of their knowledge to encourage managers to abstain from earnings management practices.

ROBUSTNESS

In order to guarantee the reliability and consistency of the findings, the research has conducted multiple types of sensitivity analysis. Based on median to

Table 3

Panel Diagnostic Test

Method Type	Test Type	Chi-Square Statistics	P-Value	Decision
OLS	Cook-Weisberg test for heteroskedasticity	410.49	0.0001	OLS is not sufficient to proceed for analysis
OLS vs. Random Effect	Breusch and Pagan Lagrangian multiplier test	13.62	0.0001	Random Effect Model is consistent
Fixed Effect vs. Random Effect Model	Hausman	27.25	0.0024	Fixed effect is consistent

Source: Authors' compilation.

Table 4

Correlation (Karl Pearson) of Response and Predicted Variables

Variables	AM	RM	BIG_4	MB	SIZE	LEV	ROA	NOA	INST	DIV	OWN	AB_ACC
AM	1											
RM	-0.12**	1										
BIG_4	-0.24**	-0.12**	1									
MB	-0.16**	-0.17**	-0.07**	1								
SIZE	0.22**	-0.31**	-0.07**	0.24**	1							
LEV	0.05**	-0.05**	-0.02	0.03	0.10**	1						
ROA	-0.39**	0.15**	0.12**	0.04	-0.31**	-0.04	1					
NOA	0.14**	0.01	-0.18**	-0.08**	-0.03	-0.12**	-0.06**	1				
INST	-0.03	0.03	0.06**	-0.01	-0.04	-0.09**	0.01	-0.09**	1			
DIV	-0.02	0.02	0.02	-0.01	0.01	0.01	-0.03	-0.01	0.03	1		
AB_ACC	0.04	-0.02	0.01	0.01	-0.04	-0.01	0.01	0.04	-0.02	-0.01	-0.01	1

Source: Authors' compilation.

Note: ** 0.05 level of significance.

lower and median to higher, firms are divided into two groups to show the impact of sensitivity analysis. When evaluating the impact of audit quality on the management of earnings for business group firms, two factors are considered: large versus small businesses and high-performance versus low-performance businesses.

In column 1 of Table 6's first sensitivity analysis, it is evident that audit quality has a negative significant relationship with accrual-based earnings management for large enterprises (t -value -2.33 , $p < 0.02$). With a t -value of -5.64 ($p < 0.01$) for small-sized enterprises, audit quality is negatively significant when combined with accrual-based earnings management in column 2. According to the findings, audit firms are completely concerned about their reputations going forward and will use their experience regardless of the size of the organisation.

The research included both high- and low-performing enterprises for the second robustness test (Table 6). Column 3 shows that audit quality of large-sized enterprises has a negative significant relationship with accrual-based earnings management (t -value -5.75 , $p < 0.01$). With a t -value of -5.81 ($p < 0.01$) for small-sized enterprises, audit quality is negatively significant when combined with accrual-based earnings management in column 4. Firms are concerned about their future success, according to the results. Firms use the Big_4 firms' auditing services to ensure the regularity of earnings quality. As there are numerous stakeholders, maintain standards for the calibre of earnings of the firms. Without the auditing services of BIG_4 businesses, it is challenging for a manager to live up to stakeholder expectations. In today's world, meeting stakeholder expectations in terms of audit quality is crucial for a corporation.

Panel Regression Fixed Effect Model, Dependent Variable AM and RM

Dependent Variable	AM			RM		
	Coefficient	t-test	P-Value	Coefficient	t-test	P-Value
INTERCEPT	0.14**	1.96	0.05	0.26***	6.92	0.001
BIG_4	-0.08***	-4.04	0.001	-0.02**	-1.98	0.048
MB	-0.02***	-7.05	0.001	-0.01***	-2.9	0.004
SIZE	0.07***	6.5	0.001	-0.05***	-9.25	0.001
LEV	0.05	1.27	0.206	0.02	1.25	0.211
ROA	-0.15***	-7.47	0.001	-0.02	-1.58	0.114
NOA	-0.06	-1.03	0.304	0.00	-0.08	0.934
INST	0.05	0.74	0.461	0.04	1.11	0.266
DIV	-0.02	-1.29	0.197	0.01	1.1	0.272
ACC	-0.06	-1.2	0.23	-0.04	-1.42	0.157
R-Sqaure	0.29			0.10		
F (10,1061)	26.85***	0.001		12.98***	0.001	
Durbin-Watson	2.06			2.03		
Number of Observations	1340			1340		
Number of Years	5			5		
Individual Effect	Yes			Yes		

Source: Authors' calculation.

Note: *, **, *** indicate 0.1, 0.05 and 0.01 level of significance.

The study's primary findings are strengthened by the robustness results.

CONCLUSION

This study examines the relationship between earnings management and audit quality among Indian business group enterprises using a sample spanning from 2016 to 2021, consisting of 268 businesses. Annual data analysis is employed to achieve the study's objective, utilizing a composite proxy for actual earnings management as well as accrual-based earnings management to understand how Indian business group managers manage their earnings. The variable BIG_4 is used as a dummy variable to assess the quality of audits conducted by firms. The findings reveal a negative correlation between earnings management and audit quality in both scenarios, consistent with prior research [8, 9]. The study suggests that Indian business group

firms are less inclined to employ earnings management techniques and prioritize the quality of their earnings, particularly in light of the strict definition of the auditor's role in corporate governance procedures under the New Companies Act of 2013.

Clause 49 of the New Companies Act of 2013 emphasizes the responsibility for overseeing the financial reporting process, ensuring the accuracy, sufficiency, and credibility of a company's financial statements, and disclosing financial information. Multiple robustness tests, in addition to the primary test, confirm the impact of audit quality on earnings management, with findings from all sensitivity analyses indicating a negative relationship between earnings management and audit quality. The study acknowledges several limitations, including the relatively short data period used and the reliance solely on the Modified Akinlo [21] for assessing accrual-based earnings management. Additionally, the

Table 6

Robustness Check

Dependent Variable	AM- Big Size Firms			AM- Small Size Firms			Dependent Variable	AM- Low Performance			AM- High Performance Firms		
	Coefficient	t-test	P > t	Coefficient	t-test	P > t		Coefficient	t-test	P > t	Coefficient	t-test	P > t
INTERCEPT	0.45***	5.28	0.01	0.33***	4.71	0.01	INTERCEPT	-0.59***	-3.89	0.01	0.02	0.22	0.82
BIG_4	-0.08**	-2.33	0.02	-0.14***	-5.64	0.01	BIG_4	-0.19***	-5.75	0.01	-0.13***	-5.81	0.01
MB	-0.03***	-5.03	0.01	-0.02***	-5.13	0.01	MB	-0.03***	-6.28	0.01	-0.01	-1.66	0.10
LEV	-0.04	-0.73	0.46	0.03	0.53	0.60	SIZE	0.04**	2.37	0.02	0.07***	5.74	0.01
ROA	-0.16***	-6.95	0.01	-0.32***	-10.51	0.01	LEV	0.11	1.70	0.09	-0.01	-0.31	0.76
NOA	-0.02	-0.19	0.85	0.20***	2.64	0.01	NOA	0.38***	4.18	0.01	-0.09	-1.33	0.18
INST	-0.04	-0.45	0.66	0.05	0.49	0.63	INST	0.26**	2.20	0.03	-0.18***	-2.46	0.01
DIV	-0.07*	-1.90	0.06	0.00	0.12	0.90	DIV	-0.03	-1.08	0.28	-0.02	-0.64	0.52
ACC	-0.05	-0.66	0.51	-0.12*	-1.79	0.07	ACC	-0.04	-0.47	0.64	-0.08	-1.20	0.23
R-Square	0.2019			0.3091			R-Square	0.1843			0.1428		
F (9,526)	14.88***		0.01	29.04***		0.01	F (9,526)	13.62***		0.01	9.77***		0.01
DW Test							DW test						
No of observations	670			670			No of observations	670			670		
No of Years	5			5			No of Years	5			5		
Individual Effect	Yes			Yes			Individual Effect	Yes			Yes		

Source: Authors' calculation.

Note: *, **, *** indicate 0.1, 0.05 and 0.01 level of significance.

study utilizes only one dummy variable (BIG_4) to gauge audit quality, while alternative proxies such as audit tenure, audit size, and audit committee could provide further insights. The study suggests that further research in these areas would enhance understanding within

a broader context, potentially informing policymakers, regulators, and the government about the shortcomings of principles-based accounting and advocating for revisions and improvements to the current accounting standards system.

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ABOUT THE AUTHORS



Sasikanta Tripathy — PhD, Assist. Prof., Department of Economics and Finance, College of Business, University of Bahrain, Shakhir, Bahrain
<https://orcid.org/0000-0003-3193-0190>
 Corresponding author:
 stripathy@uob.edu.bh



Ramesh Chandra Das — PhD, Assist. Prof., Department of Accounting, Bhadrak Autonomous College, Bhadrak, India
<https://orcid.org/0000-0001-9802-1544>
 rameshchandradas99@gmail.com

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